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ABSTRACT OF THE DISCLOSURE

HIGH VOLUME SECURE INTERNET SERVER

A distributed data processing system, computer program product, and method of efficiently serving secure network transactions is disclosed. The present invention achieves efficiency and scalability by distributing the work load involved in secure network communications among three classes of servers, inline crypto engines for performing encryption and decryption, dedicated handshake engines for establishing cryptographic parameters, and transaction servers for actually servicing the transactions. The server system can be scaled so that more resource-intensive operations, such as the handshaking procedure, can be distributed across a larger number of servers than less resource-intensive operations. In addition, an added benefit is realized by having transaction servers operate on unencrypted data in that a packet-sniffing firewall or site-wide web document caching system may be implemented, whereas such features were previously unavailable to secure Internet sites.